



User's Manual

2.4GHz Color Wireless Camera Kit

MODEL: CM-A815

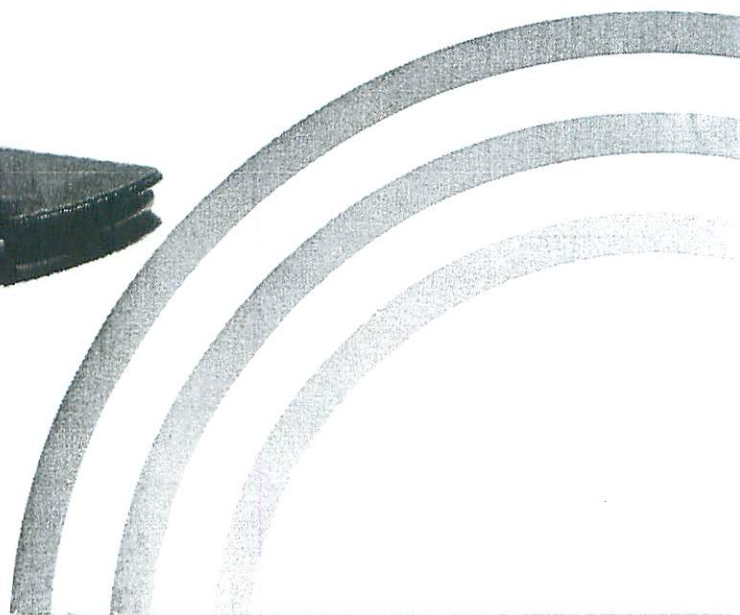


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EU Environmental Protection

Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your Local Authority or retailer for recycling advice.



INTRODUCTION

Thank you for your interest and support in our product and purchasing this wireless camera kit. This product works at ISM-2.4GHz frequency band, which could be legally used worldwide without permission. We feel confident that you will be pleased with the quality and features of this product.

The camera features one CMOS image sensor and a transmitting module to capture the image and transmit them wirelessly.

The receiver features a receiving module to receive and output AV signals.

Notice

Notice: This product may cause interferences with other wireless equipment that operates at 2.4GHz ISM band. Please turn off one of the equipments to eliminate the interference.

Product Assurance: This camera will emit electromagnetic wave, just like other wireless products. But its transmitting power is less than other wireless products such as mobile phones. The 2.4GHz wireless camera meets wireless frequency security standards and recommended indexes while working. These standards and indexes are certificated by academic organization and represent the cogitative research of the scientific workers who continuously explore and annotate the involved fields. So we believe that our products are safe for customers.

Approval Information

All our products meet the requirements of approval FCC or CE, and are granted the FCC or CE certification. They are authorized to bear FCC or CE mark.

FCC

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
 - (2) this device must accept any interference received, including interference that may cause undesired operation
- Changes and modification not expressly approved by the manufacturer or registrant of this equipment can void your authority to operate this equipment under Federal Communications Commissions rules.

CE

This product complies with standards including **Low Voltage Device Directive 73/23/EEC**; **EMC Directive 89/336/EEC** and **R&TTE Directive 1999/5/EC**. It passed the subject tests by the authority concerned and is authorized to bear **CE** mark.

Restrictions

1. DO NOT use this product to violate one's privacy. Monitoring one's activities without consent is illegal and this product is not designed and manufactured for such purpose;
2. DO NOT put this product near any medical equipment. Radio waves might potentially cause breakdown of electrical medical equipment. So this product should be placed at least 1 feet away from any heart pacemaker. Radio waves might potentially influence heart pacemaker and lead to respiratory disturbance;
3. DO NOT use this product for any illegal activities. We shall not be responsible for any consequences of illegal acts committed by the user.

Maintenance

1. Ensure the sufficient ventilation space is available;
2. Do not shake or strike the product;
3. Keep it dry and dustless and avoid exposing it to direct sunlight;
4. Do not place product near any magnetic objects;
5. Avoid putting the product in places where the constantly changed temperature or humidity occurs;
6. Keep product away from heat sources such as electric heater;
7. Do not use the camera near aggressive chemicals;
8. Do not use this camera near water, for example, near a bath tub, wash bowl, kitchen sink or laundry tub, in a wet basement or near a swimming pool and the like;
9. Do not use the camera in the places which are enclosed by metal. The surrounding metal like lifter, cabin, may shield the electromagnetic wave, and result in failure of signal reception;
10. Please obey the local government's environment protection policy;
11. Please turn off the power when left unused;
12. Do not disassemble or repair the camera or receiver, doing so might cause damages to the product.

PRODUCT

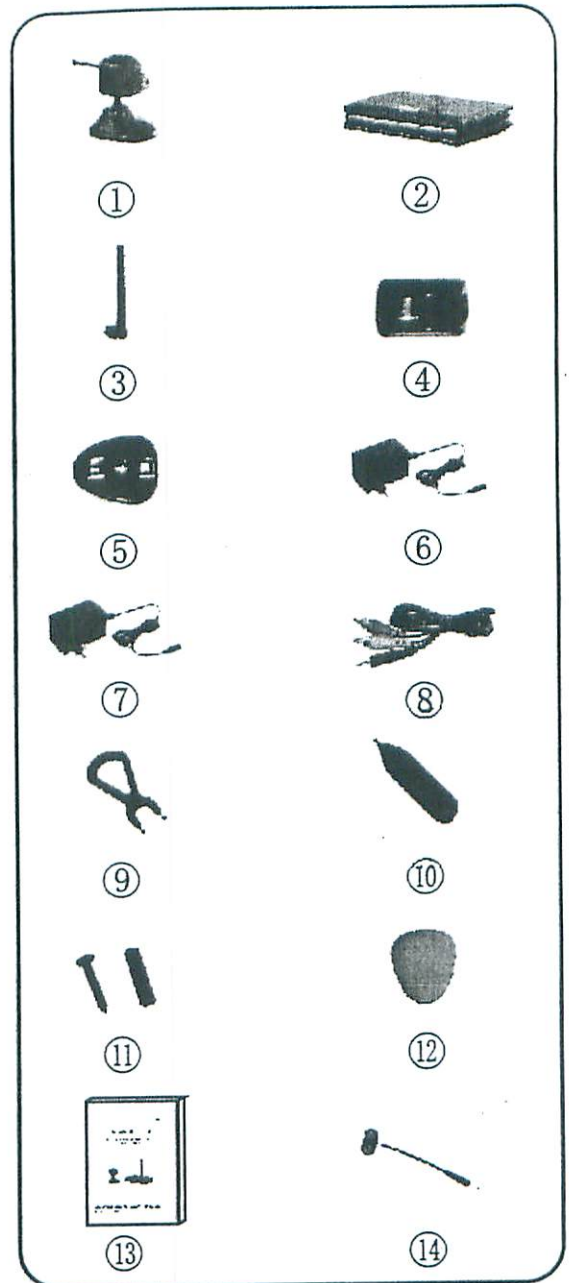
Package Contents

This package comes with the following items. Please check whether they are all included in the packaging box, if one or some is missing, contact the retailer for replacement.

- ① Wireless camera × 1
- ② Wireless receiver × 1
- ③ Antenna for receiver × 1
- ④ Holder for receiver × 1
- ⑤ Mounting plate for camera × 1
- ⑥ DC 8.0V power adapter for camera × 1
- ⑦ DC 8.0V power adapter for receiver × 1
- ⑧ AV cable × 1
- ⑨ Lens adjuster × 1
- ⑩ Channel pick for camera × 1
- ⑪ Mounting screw × 1
- ⑫ Foam base for camera × 1
- ⑬ User's manual × 1
- ⑭ Battery clip × 1

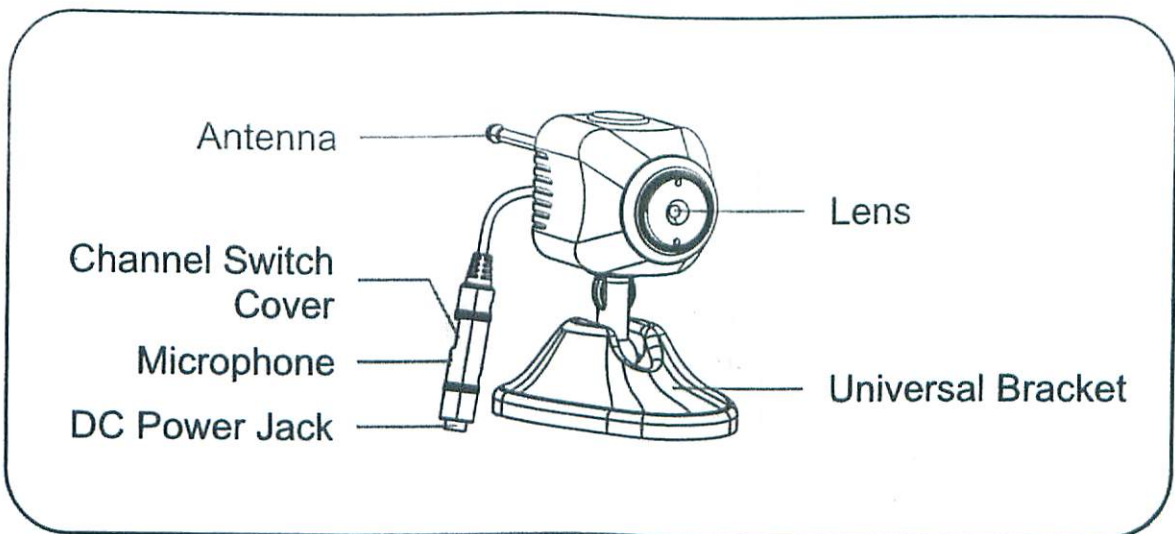
Note:

- 1. This product can be either black or silver.
- 2. The pictures may vary from the actual objects.

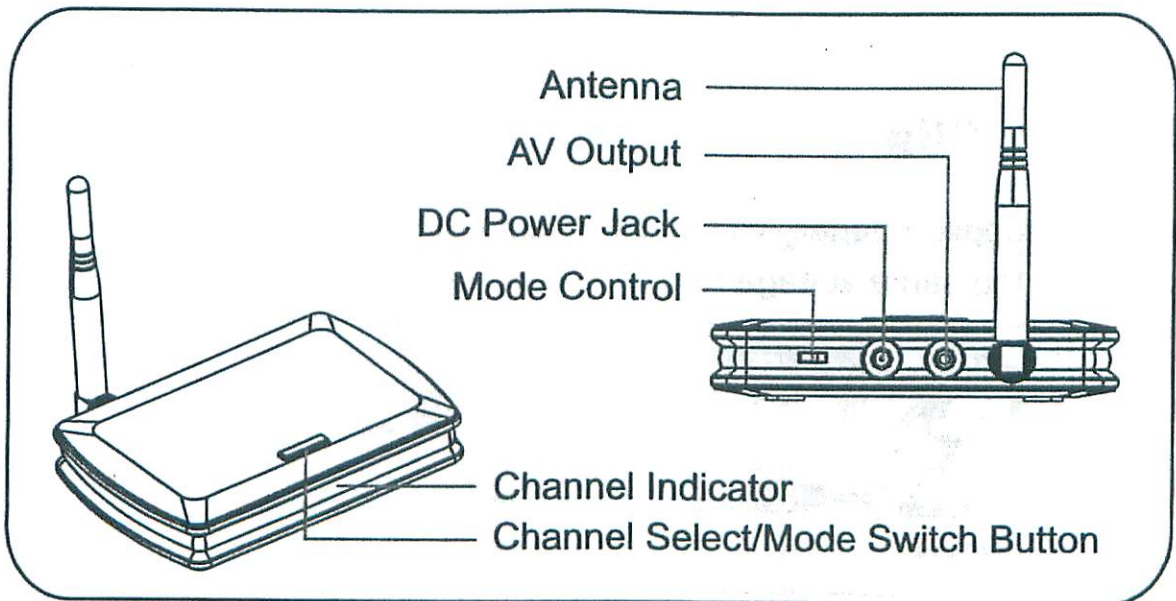


Feature Locations

1. Camera



2. Receiver



Adapter

This product always conforms to the authenticated AC adapter. The adapter should be marked one of the following:



UL Mark

American power supply authentication



SAA Mark

Australia power supply authentication



CE Mark

European Union power supply authentication



PSE Mark

Japan power supply authentication



GS Mark

German power supply authentication



CCC Mark

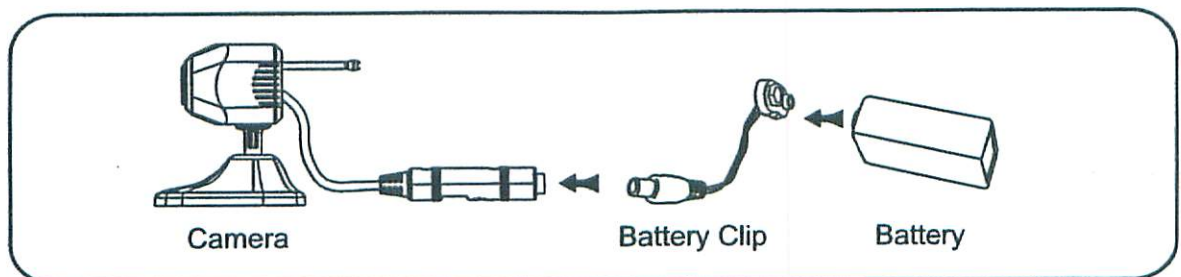
China power supply authentication

Note:

When using the power adapter, make sure the rating voltage on it is compatible with that of the device to avoid potential damages resulting from incorrect usage of power supply.

Battery Clip

With the supplied battery clip, the camera could be powered by battery of the same voltage for temporary use.

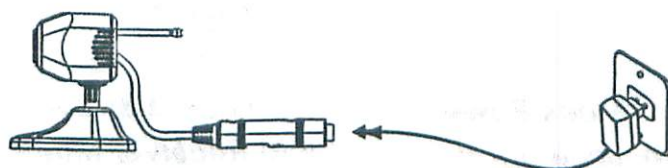


INSTALLATION & USAGE

Installation

1. Connect the power jack of adapter (DC 8.0V 300mA) or battery with battery clip to camera.

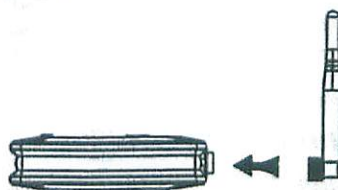
a. Connect with adapter



b. Connect with battery clip



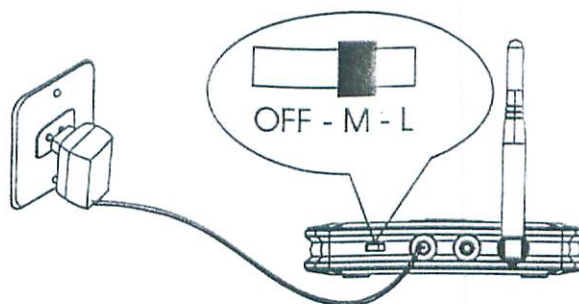
2. Connect the antenna to the receiver.



3. Connect the receiver to the monitor/TV with AV cable. (Red socket for audio; yellow socket for video). Turn on the monitor/TV and select AV mode.

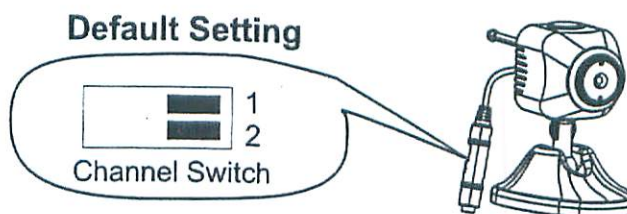


4. Connect the power jack of adapter (DC 8.0V 300mA) to receiver. Slide **Mode Control** switch to **M** position and the channel indicator lights up green.



Note: The receiver provides **Power Off (OFF)** mode, **Manual mode (M)** and **Channel Scan mode (L)**. Please refer to **Receiver Mode Setup** section on page 12 for more details.

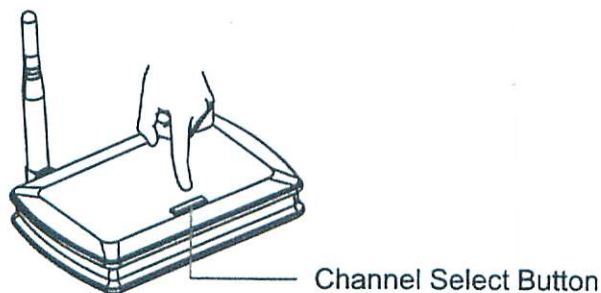
5. Open the channel switch cover and set the camera to one desired channel.



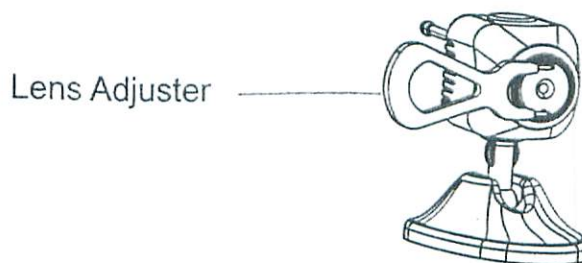
Notes:

Please refer to **Camera Channel Setup** section on page 11 for more details.
Please recover the channel switch after finished setting.

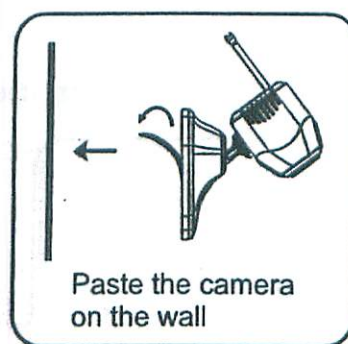
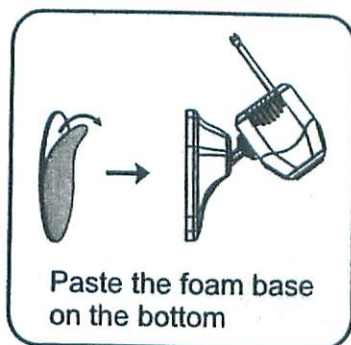
6. Press the channel select "**SELECT**" button on the receiver until the channel indicator matches to the channel on the corresponding camera, and the monitor/TV will display pictures.



7. If the picture is blur, you could adjust the lens focus with lens adjuster to make the picture clear.



8. Mount the camera to a desired location.



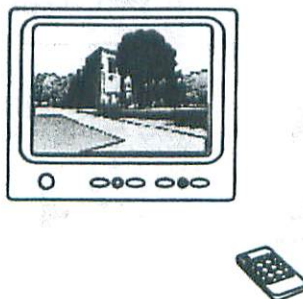
Notes:

You can paste the foam base on the bottom of the Universal Bracket to fix the camera.

When you fix the camera with the mounting plate, the foam base can not be pasted on the bottom of the Universal Bracket.

*Please refer to **Fix the Camera** section on page 10 for more details to fix the camera with the mounting plate.*

9. Adjust the brightness, contrast and color setting of the monitor/TV to get the best display effect.

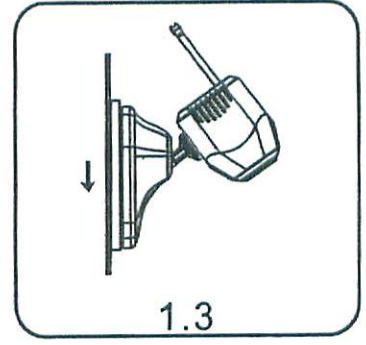
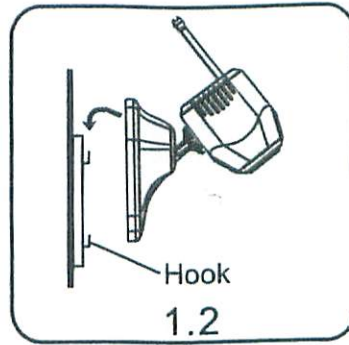
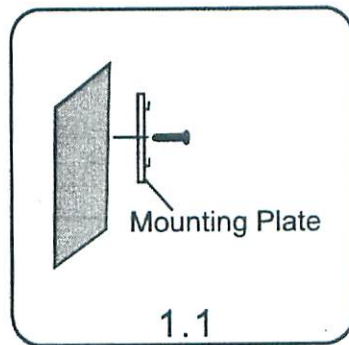


Fix the Camera

Please follow the steps below if you want to fix the camera to wall or ceiling.

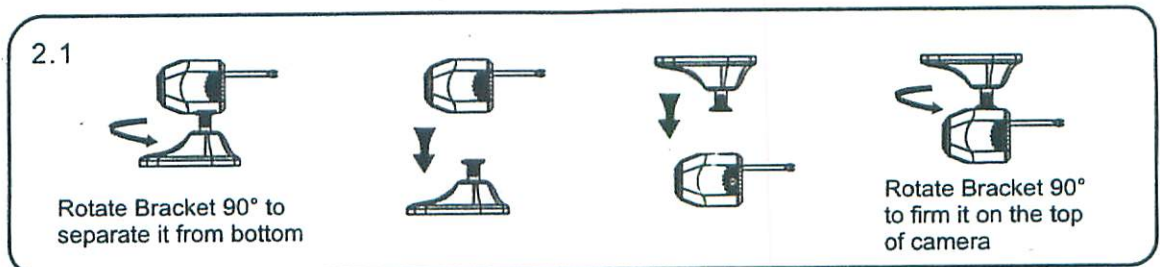
1. Fix to Wall

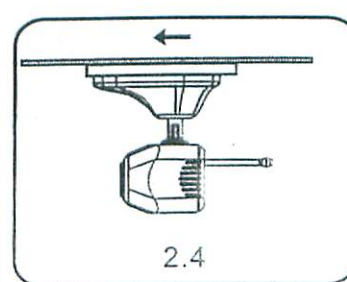
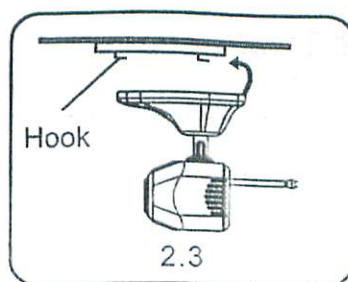
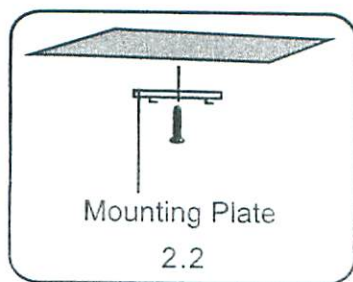
- 1.1 Drill one hole on the mounting surface, insert the anchor into the hole, then align the mounting plate with the hole you just drilled and drive the screw through the plate into the anchor;
- 1.2 Hang the camera on the hooks of mounting plate;
- 1.3 Push downwards the camera firmly.



2. Fix to Ceiling

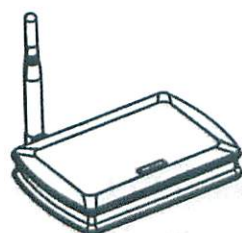
- 2.1 Detach the universal bracket from the camera and then install it to the camera top for avoiding reverse picture;
- 2.2 Secure the mounting plate to ceiling with screw;
- 2.3 Hang the camera on the hooks of mounting plate;
- 2.4 Push the camera firmly as the shown direction.



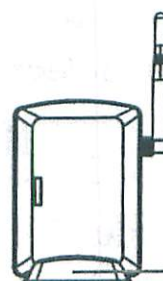


Locate the Receiver

The receiver can be placed horizontally or vertically. When it is placed vertically, the supplied holder is required.



Horizontal



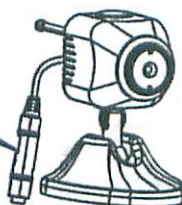
Vertical

Holder

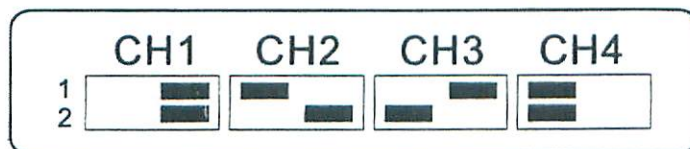
Camera Channel Setup

This camera has 4 selectable channels to avoid possible interference from other nearby wireless devices. Please open the channel switch cover and set the Channel Switch as the following diagram.

Default Setting



Channel Switch Setup Diagram



Channel Frequency

CH1=2,414MHz;
CH2=2,432MHz;
CH3=2,450MHz;
CH4=2,468MHz

Receiver Mode Setup

The receiver can support up to 4 cameras working at the same time. It provides **Power Off** mode (**OFF**), **Manual** mode (**M**) and **Channel Scan** mode (**L**).

1. **Power Off** mode: Slide **Mode Control** switch to **OFF** to power the receiver off;

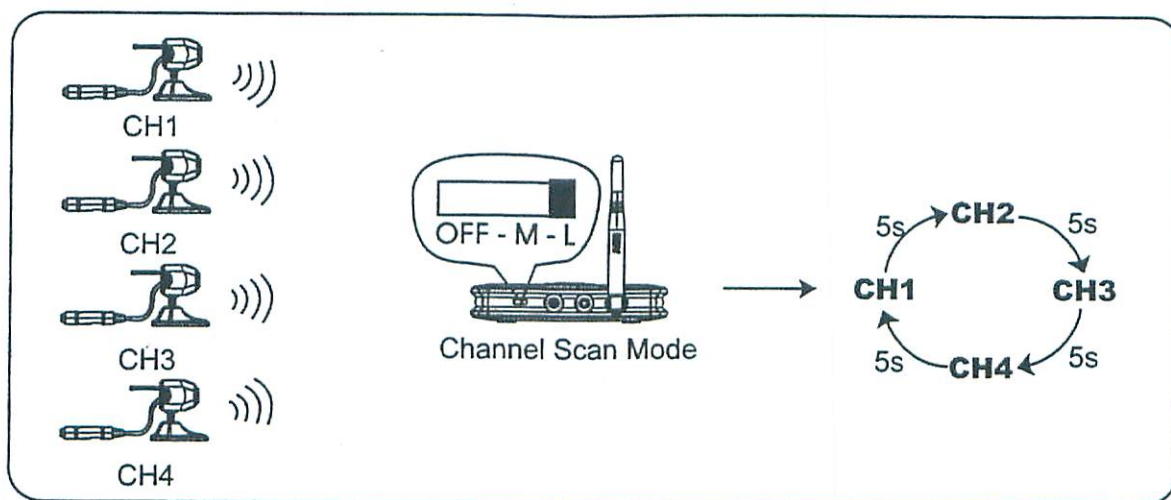


2. **Manual** mode: Slide **Mode Control** switch to **M** to enter **Manual** mode. In manual mode, the receiver channel won't change until you press the **Channel Select** button;



3. **Channel Scan** mode: Slide **Mode Control** switch to **L** to enter channel scan mode. In channel scan mode, all the channels will display one by one looping in turn per 5s. Slide the **Mode Control** switch to **M** or **OFF** to exit.

Tip: At the manual mode, you could press and hold the Channel Select "SELECT" button more than 5s to enter the channel scan mode. Press the button again to exit.











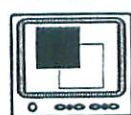



SPECIFICATIONS

Items		Value
Transmission Frequency		ISM 2,400MHz~ 2,483MHz
Antenna Type		Omni
Transmission Distance		100m (Without Block)
Operating Temperature		-10°C~+50°C /+14°F~+122°F
Storage Temperature		-20°C~+60°C /-4°F~+140°F
Storage Humidity		≤85% RH
Camera	Imaging Sensor	CMOS
	CMOS Total Pixels	628 x 582(PAL)/ 510 x 492(NTSC)
	S/N Ratio	40dB (AGC OFF)
	Horizontal Resolution	380 TV Lines
	Minimum Illumination	5 Lux/F1.2
	Transmission Power	10mW (CE)/2mW (FCC)
	Power Supply	DC 8.0V 300mA
	Consumption Current	90 mA (Max.)
	Dimensions (WxDxH)	23mmx31mmx23mm (Main Body)
	Weight	Approx.20g (Main Body)
Receiver	Receiving Sensitivity	-85dBm
	Power Supply	DC 8.0V 300mA
	Consumption Current	240mA (Max.)
	Video Output Level	1V _{p-p} @75Ω
	Audio Output Level	1V _{p-p} @10kΩ
	Dimensions (WxDxH)	100mmx70mmx18mm (Main Body)
	Weight	Approx. 99g (Main Body)

* Specifications are subject to minor change without prior notice.

TROUBLESHOOTING

When you experience the operation problems, please check and try the following yourself before claiming that it is the defective product or consulting the experienced technician.

Abnormal Phenomena		Possible Reasons/Solutions
 No image	 No sound	Check whether the camera/receiver is connected to power supply and powered on.
 Snowflakes on image	 Noisy	1. Check if the channel of receiver is the same as that of camera; 2. Check the distance & blocks.
 Blur image	 Normal sound	Adjust the lens of camera.
 Ghost image	 Normal sound	1. Interfered with other devices; 2. Check the distance & blocks.
 No color	 Normal sound	Mismatching the TV system of PAL or NTSC.
 Normal image	 Noisy	Interfered with other devices nearby; Remove or turn off such devices.